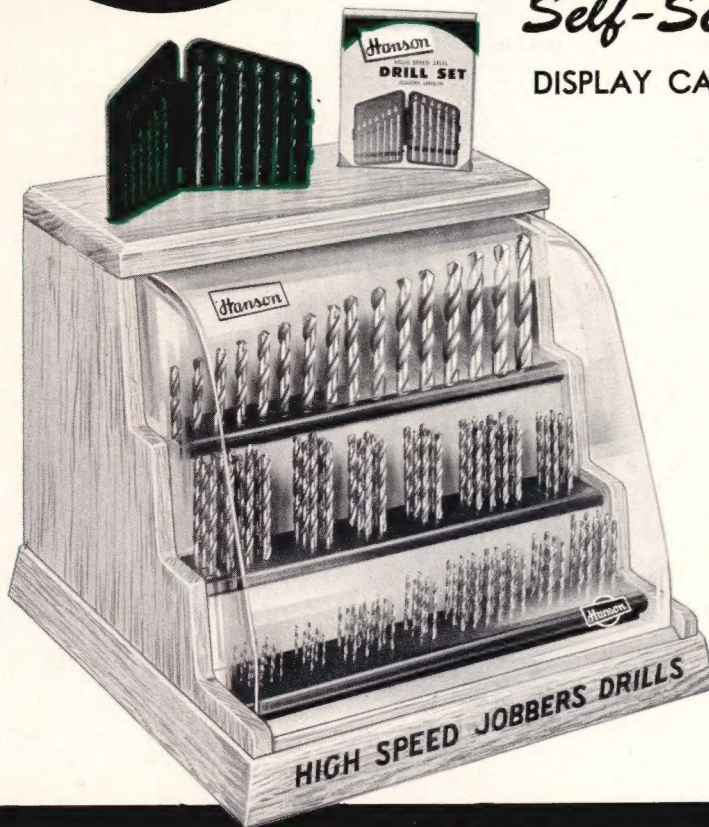


**Hanson**

# HIGH SPEED STEEL DRILLS AND SETS



*Self-Seller*  
DISPLAY CABINET

*Ace  
Super Set*

**Ace**

**TAPS, DIES  
AND TOOLS**



**HENRY L. HANSON CO., WORCESTER, MASS., U.S.A.**





**Hanson**

**HIGH SPEED DRILLS**

**Ace TAPS, DIES and TOOLS**

*Guarantee*

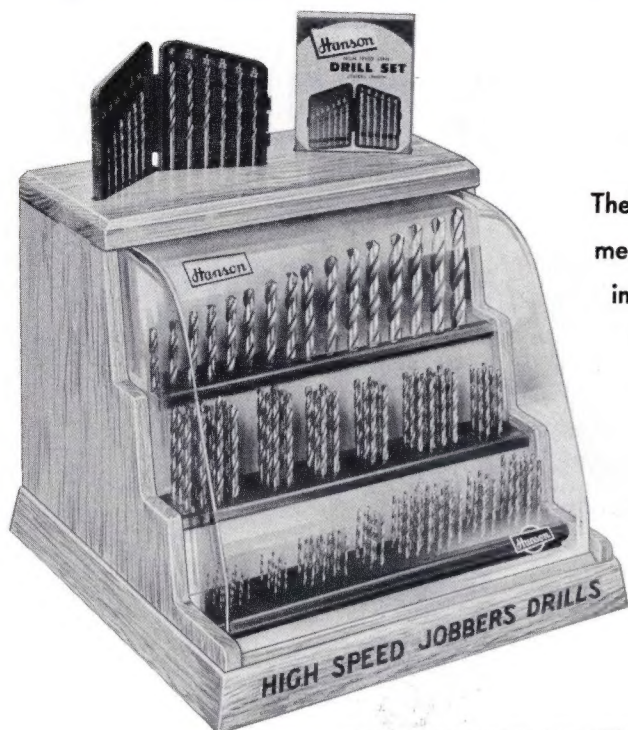
THE USER OF ANY TOOL  
MANUFACTURED BY THE  
HENRY L. HANSON COMPANY  
MUST BE COMPLETELY SATISFIED  
WITH ITS PERFORMANCE IN  
EVERY WAY, OR THE TOOL WILL  
BE REPLACED FREE OF CHARGE.

CATALOG NO. 8A

**HENRY L. HANSON COMPANY**

**Worcester, Mass., U.S.A.**





## Self-Seller

DISPLAY CABINET NO. 157

HIGH SPEED STEEL, JOBBERS LENGTH DRILLS

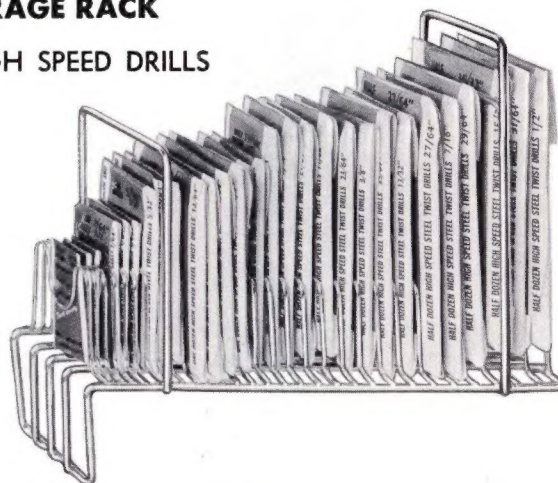
The **Hanson Self-Seller** Drill Display answers every problem in the merchandising of drills, from ordering to selling. Beautifully finished in natural oak. The crystal clear cover highlights the drills against the pastel green background. Requires only 14 inch square counter space. Check the following outstanding features

- ✓ From any angle — Displays drills best
- ✓ Pilfer Proof crystal clear cover
- ✓ Controlled inventory storage rack
- ✓ Supporting holes serve as drill gauge
- ✓ Size and price legibly marked for every size
- ✓ Quantities varied according to demand

### CONTROLLED INVENTORY STORAGE RACK

FOR **Hanson Self-Seller** DISPLAY CABINET OF HIGH SPEED DRILLS

A unique feature, of the cabinet, is the storage rack for extra stock. It has 29 compartments to hold a standard package of each size drill displayed. The hinged cover on the display opens from the front making the storage rack easily accessible or removable. In transferring drills from the rack to the display it is immediately apparent when reordering is necessary.



### LIST OF CONTENTS

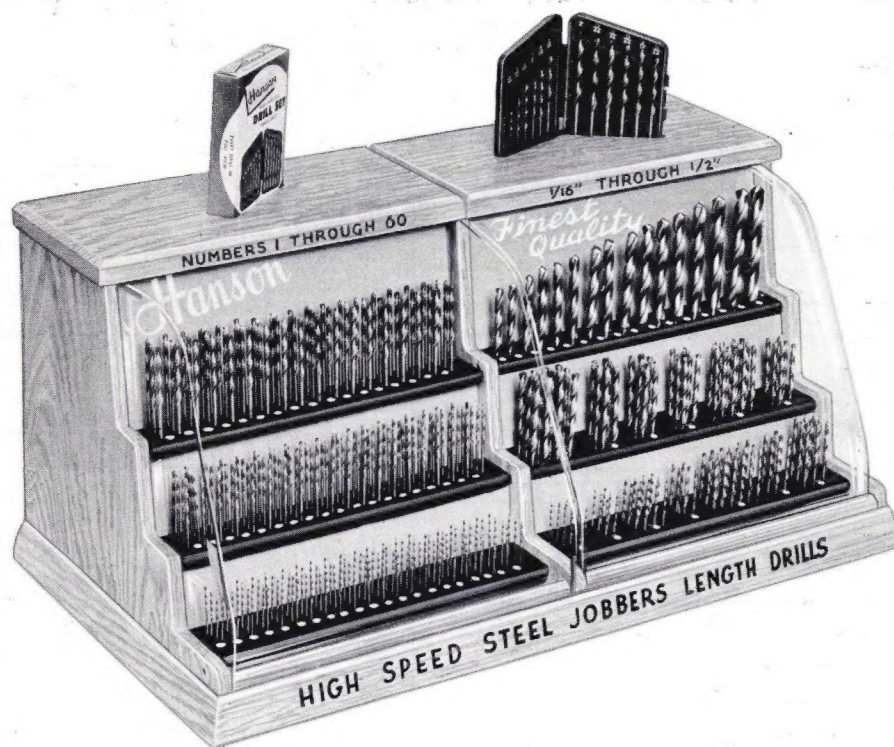
DISPLAY CABINET NO. 157

HIGH SPEED STEEL, JOBBERS LENGTH DRILLS

DRILL SIZE	QUANTITY	DRILL SIZE	QUANTITY	DRILL SIZE	QUANTITY
1/16	12	7/32	6	3/8	3
5/64	6	15/64	6	25/64	2
3/32	12	1/4	12	13/32	3
7/64	6	17/64	2	27/64	2
1/8	18	9/32	3	7/16	3
9/64	6	19/64	2	29/64	2
5/32	9	5/16	3	15/32	3
11/64	6	21/64	2	31/64	2
3/16	12	11/32	3	1/2	3
13/64	6	23/64	2	SET # 113	1

SHIPPING  
WEIGHT 22 LBS.





### TWIN *Self-Seller* DISPLAY CABINET OF HIGH SPEED DRILLS

The **Hanson** No. 499 TWIN *Self-Seller* Display for high speed drills combines in one space saving unit the contents of the No. 157 Display of fractional sizes with a complete inventory to display and sell wire gauge drills from No. 1 to No. 60 inclusive. Individual drill gauge holes make selection and stocking easy.

The TWIN *Self-Seller* Display offers your customers a practically complete assortment of drills with a minimum investment.

The No. 499 Twin Display contains all items in the No. 157 Display plus the following Wire Gauge Drills.

SHIPPING WEIGHT 40 LBS.

DRILL SIZE NO.	Quan- tity	DRILL SIZE NO.	Quan- tity	DRILL SIZE NO.	Quan- tity	DRILL SIZE NO.	Quan- tity	DRILL SIZE NO.	Quan- tity	DRILL SIZE NO.	Quan- tity	DRILL SIZE NO.	Quan- tity	DRILL SIZE NO.	Quan- tity	DRILL SIZE NO.	Quan- tity	DRILL SIZE NO.	Quan- tity
1	6	7	12	13	6	19	4	25	8	31	4	37	4	43	8	49	4	55	4
2	6	8	6	14	6	20	4	26	8	32	4	38	8	44	8	50	4	56	4
3	6	9	6	15	6	21	8	27	4	33	8	39	4	45	4	51	4	57	4
4	6	10	6	16	6	22	4	28	4	34	4	40	8	46	4	52	8	58	4
5	6	11	6	17	6	23	4	29	12	35	4	41	4	47	8	53	4	59	4
6	6	12	6	18	6	24	4	30	4	36	12	42	4	48	8	54	4	60	4



# HIGH SPEED STEEL JOBBER'S' DRILLS

# Hanson

## STYLE NO. 601

JOBBER'S'  
LENGTH,  
HIGH SPEED  
STEEL DRILLS



Hanson

High Speed  
Steel Drills  
are of the  
Finest Quality  
and are  
guaranteed  
to give  
complete  
consumer  
satisfaction.  
They are  
designed  
to provide  
maximum life  
with minimum  
breakage.

Size in Inches	Consumer Price Each	Decimal Equivalent	LENGTH IN INCHES		Standard Package	WEIGHT PER DOZ. OUNCES
			Overall	Flute		
1/64		.0156	3/4	3/16	12	1
1/32		.0312	1-3/8	1/2	12	1
3/64		.0469	1-3/4	3/4	12	1
1/16		.0625	1-7/8	7/8	12	1
5/64		.0781	2	1	12	1
3/32		.0938	2-1/4	1-1/4	12	1
7/64		.1094	2-5/8	1-1/2	12	2
1/8		.1250	2-3/4	1-5/8	12	2
9/64		.1406	2-7/8	1-3/4	12	2
5/32		.1562	3-1/8	2	12	3
11/64		.1719	3-1/4	2-1/8	12	4
3/16		.1875	3-1/2	2-5/16	12	5
13/64		.2031	3-5/8	2-7/16	12	5
7/32		.2188	3-3/4	2-1/2	12	6
15/64		.2344	3-7/8	2-5/8	12	7
1/4		.2500	4	2-3/4	12	8
17/64		.2656	4-1/8	2-7/8	6	9
9/32		.2812	4-1/4	2-15/16	6	11
19/64		.2969	4-3/8	3-1/16	6	12
5/16		.3125	4-1/2	3-3/16	6	13
21/64		.3281	4-5/8	3-5/16	6	14
11/32		.3438	4-3/4	3-7/16	6	16
23/64		.3594	4-7/8	3-1/2	6	18
3/8		.3750	5	3-5/8	6	20
25/64		.3906	5-1/8	3-3/4	6	22
13/32		.4062	5-1/4	3-7/8	6	24
27/64		.4219	5-3/8	3-15/16	6	27
7/16		.4375	5-1/2	4-1/16	6	30
29/64		.4531	5-5/8	4-3/16	6	33
15/32		.4688	5-3/4	4-5/16	6	36
31/64		.4844	5-7/8	4-3/8	6	39
1/2		.5000	6	4-1/2	6	43

## HIGH SPEED DRILL WITH 1/4" *Sure-Grip* SHANKS NO. 701

Size in Inches	Consumer Price Each	Decimal Equivalent	LENGTH IN INCHES		WEIGHT PER DOZ. OUNCES
			Overall	Flute	
1/4		.2500	3-3/8	2	7
9/32		.2812	3-3/4	2	9
5/16		.3125	3-7/8	2-1/8	11
11/32		.3438	4-1/8	2-3/16	14
3/8		.3750	4-1/4	2-5/16	17
13/32		.4062	4-1/2	2-7/16	20
7/16		.4375	4-5/8	2-5/8	26
15/32		.4688	4-3/4	2-11/16	31
1/2		.5000	4-7/8	2-3/4	36



Hanson HIGH SPEED STEEL DRILLS are available with 1/4" *Sure-Grip* Shanks in sizes 1/4" and larger. The *Sure-Grip* Shank prevents the drill from turning in the drill chuck and allows the full power of the drill to be utilized. Packed in individual, plastic screw top tubes.



# Drills

## HIGH SPEED STEEL WIRE GAUGE DRILLS



**Hanson** High Speed Steel Drills are available in wire gauge sizes in full jobbers length as listed below. Standard package 1 dozen of a size.

### STYLE NO. 801

WIRE GAUGE NO.	CONSUMER PRICE EACH	DECIMAL EQUIVALENT	LENGTH IN INCHES	
			OVERALL	FLUTE
1		.2280	3 $\frac{7}{8}$	2 $\frac{5}{8}$
2		.2210	3 $\frac{7}{8}$	2 $\frac{5}{8}$
3		.2130	3 $\frac{3}{4}$	2 $\frac{1}{2}$
4		.2090	3 $\frac{3}{4}$	2 $\frac{1}{2}$
5		.2055	3 $\frac{3}{4}$	2 $\frac{1}{2}$
6		.2040	3 $\frac{3}{4}$	2 $\frac{1}{2}$
7		.2010	3 $\frac{5}{8}$	2 $\frac{7}{16}$
8		.1990	3 $\frac{5}{8}$	2 $\frac{7}{16}$
9		.1960	3 $\frac{5}{8}$	2 $\frac{7}{16}$
10		.1935	3 $\frac{5}{8}$	2 $\frac{7}{16}$
11		.1910	3 $\frac{1}{2}$	2 $\frac{5}{16}$
12		.1890	3 $\frac{1}{2}$	2 $\frac{5}{16}$
13		.1850	3 $\frac{1}{2}$	2 $\frac{5}{16}$
14		.1820	3 $\frac{5}{8}$	2 $\frac{3}{16}$
15		.1800	3 $\frac{5}{8}$	2 $\frac{3}{16}$
16		.1770	3 $\frac{5}{8}$	2 $\frac{3}{16}$
17		.1730	3 $\frac{5}{8}$	2 $\frac{3}{16}$
18		.1695	3 $\frac{1}{4}$	2 $\frac{1}{8}$
19		.1660	3 $\frac{1}{4}$	2 $\frac{1}{8}$
20		.1610	3 $\frac{1}{4}$	2 $\frac{1}{8}$
21		.1590	3 $\frac{1}{4}$	2 $\frac{1}{8}$
22		.1570	3 $\frac{5}{8}$	2
23		.1540	3 $\frac{5}{8}$	2
24		.1520	3 $\frac{5}{8}$	2
25		.1495	3	1 $\frac{7}{8}$
26		.1470	3	1 $\frac{7}{8}$
27		.1440	3	1 $\frac{7}{8}$
28		.1405	2 $\frac{7}{8}$	1 $\frac{3}{4}$
29		.1360	2 $\frac{7}{8}$	1 $\frac{3}{4}$
30		.1285	2 $\frac{3}{4}$	1 $\frac{5}{8}$
31		.1200	2 $\frac{3}{4}$	1 $\frac{5}{8}$
32		.1160	2 $\frac{3}{4}$	1 $\frac{5}{8}$
33		.1130	2 $\frac{5}{8}$	1 $\frac{1}{2}$
34		.1110	2 $\frac{5}{8}$	1 $\frac{1}{2}$
35		.1100	2 $\frac{5}{8}$	1 $\frac{1}{2}$
36		.1065	2 $\frac{1}{2}$	1 $\frac{7}{16}$
37		.1040	2 $\frac{1}{2}$	1 $\frac{7}{16}$
38		.1015	2 $\frac{1}{2}$	1 $\frac{7}{16}$
39		.0995	2 $\frac{3}{8}$	1 $\frac{3}{8}$
40		.0980	2 $\frac{3}{8}$	1 $\frac{3}{8}$

WIRE GAUGE NO.	CONSUMER PRICE EACH	DECIMAL EQUIVALENT	LENGTH IN INCHES	
			OVERALL	FLUTE
41		.0960	2 $\frac{3}{8}$	1 $\frac{3}{8}$
42		.0935	2 $\frac{1}{4}$	1 $\frac{1}{4}$
43		.0890	2 $\frac{1}{4}$	1 $\frac{1}{4}$
44		.0860	2 $\frac{1}{8}$	1 $\frac{1}{8}$
45		.0820	2 $\frac{1}{8}$	1 $\frac{1}{8}$
46		.0810	2 $\frac{1}{8}$	1 $\frac{1}{8}$
47		.0785	2	1
48		.0760	2	1
49		.0730	2	1
50		.0700	2	1
51		.0670	2	1
52		.0635	1 $\frac{7}{8}$	$\frac{7}{8}$
53		.0595	1 $\frac{7}{8}$	$\frac{7}{8}$
54		.0550	1 $\frac{7}{8}$	$\frac{7}{8}$
55		.0520	1 $\frac{7}{8}$	$\frac{7}{8}$
56		.0465	1 $\frac{3}{4}$	$\frac{3}{4}$
57		.0430	1 $\frac{3}{4}$	$\frac{3}{4}$
58		.0420	1 $\frac{5}{8}$	1 $\frac{1}{16}$
59		.0410	1 $\frac{5}{8}$	1 $\frac{1}{16}$
60		.0400	1 $\frac{5}{8}$	1 $\frac{1}{16}$
61		.0390	1 $\frac{5}{8}$	1 $\frac{1}{16}$
62		.0380	1 $\frac{1}{2}$	$\frac{5}{8}$
63		.0370	1 $\frac{1}{2}$	$\frac{5}{8}$
64		.0360	1 $\frac{1}{2}$	$\frac{5}{8}$
65		.0350	1 $\frac{1}{2}$	$\frac{5}{8}$
66		.0330	1 $\frac{3}{8}$	$\frac{1}{2}$
67		.0320	1 $\frac{3}{8}$	$\frac{1}{2}$
68		.0310	1 $\frac{3}{8}$	$\frac{1}{2}$
69		.0292	1 $\frac{3}{8}$	$\frac{1}{2}$
70		.0280	1 $\frac{1}{4}$	$\frac{3}{8}$
71		.0260	1 $\frac{1}{4}$	$\frac{3}{8}$
72		.0250	1 $\frac{1}{8}$	$\frac{5}{16}$
73		.0240	1 $\frac{1}{8}$	$\frac{5}{16}$
74		.0225	1	$\frac{1}{4}$
75		.0210	1	$\frac{1}{4}$
76		.0200	$\frac{7}{8}$	$\frac{3}{16}$
77		.0180	$\frac{7}{8}$	$\frac{3}{16}$
78		.0160	$\frac{7}{8}$	$\frac{3}{16}$
79		.0145	$\frac{3}{4}$	$\frac{3}{16}$
80		.0135	$\frac{3}{4}$	$\frac{3}{16}$

SHIPPING WEIGHTS: No. 1 Through 15—6 ozs. per doz.  
No. 16 Through 30—4 ozs. per doz.

No. 31 Through 50—2 ozs. per doz.  
No. 51 Through 80—1 oz. per doz.

# WORCESTER, MASS., U. S. A.



# HIGH SPEED STEEL DRILL SETS

# Hanson

SET NO. 113      PRICE \$      EACH

Weight 8 oz.

Contains one each size drill, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 11/64, 3/16, 13/64, 7/32, 15/64, and 1/4".

Packed in an attractive, lightweight, unbreakable polyethylene case, every drill is instantly accessible and held firmly in place. Ideal for carrying as the smooth, rounded edges will not tear or wear through pockets. Hinge and Clasp are built into case and are practically indestructible.



Set No. 414

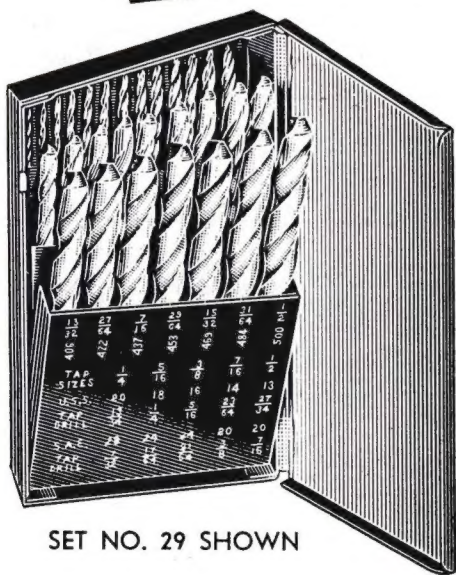


**Hanson** HIGH SPEED STEEL DRILLS with 1/4" *Sure-Grip*

Shanks are packed in an attractive green plastic, snap fastener case. *Sure-Grip* Shanks deliver all the power to the cutting edge of the drill as they prevent slipping of the drill in the chuck.

SET NO.	SIZES	PRICE EACH	WEIGHT EACH
414	5/16 3/8 7/16 1/2		8 oz.
145	1/4 5/16 3/8 7/16 1/2		9 oz.

**Hanson** High Speed Jobbers' Length Drills are also packed in metal drill indexes as listed below.



SET NO. 29 SHOWN

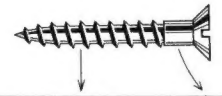
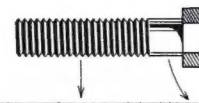
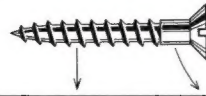
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<b>SET NO. 13</b>	<b>PRICE \$ EACH</b>	WT. 1/2 LB. EA.
Contains same sizes as set No. 113.		
<b>SET NO. 15</b>	<b>PRICE \$ EACH</b>	WT. 2 1/2 LB. EA.
Holds 15 drills ranging from sizes 1/16" to 1/2" by 32nds. and is packed in the same index as set No. 29.		
<b>SET NO. 29</b>	<b>PRICE \$ EACH</b>	WT. 3 1/2 LB. EA.
Holds 29 drills with a range from 1/16" to 1/2" by 64ths.		
<b>SET NO. 60</b>	<b>PRICE \$ EACH</b>	WT. 1 1/4 LB. EA.
Holds 60 wire gauge drills from No. 1 to No. 60 inclusive.		
<b>SET NO. 80</b>	<b>PRICE \$ EACH</b>	WT. 2 OZ. EA.
Holds 20 wire gauge drills from No. 61 to No. 80 inclusive. Packed in round stand with clear plastic cover.		



# Drills

## INFORMATION CHART



DRILL THIS SIZE HOLE		TO TAP FOR THIS SIZE BOLT OR SCREW	TO ALLOW CLEARANCE FOR THIS SIZE BOLT	FOR THIS SIZE WOOD SCREW PILOT		TO CLEAR SCREW BODY
DRILL SIZE	DEC. EQUIV.			IN SOFT WOOD	IN HARD WOOD	
60	.0400					
59	.0410					
58	.0420			No. 3		
57	.0430					
56	.0465	0x80				
3/64	.0469					
55	.0520			No. 4		
54	.0550	1x56			No. 3	
53	.0595	1x64, 1x72		No. 5		
1/16	.0625					
52	.0635			No. 6	No. 4	
51	.0670		No. 0	No. 7		
50	.0700	2x56, 2x64				
49	.0730				No. 5	
48	.0760			No. 8		
5/64	.0781					
47	.0785	3x48			No. 6	
46	.0810		No. 1			
45	.0820	3x56		No. 9		
44	.0860	4x36			No. 7	
43	.0890	4x40		No. 10		
42	.0935	4x48	No. 2			
3/32	.0937					
41	.0960					
40	.0980	5x36		No. 11	No. 8	
39	.0995					
38	.1015	5x40		No. 12		
37	.1040	5x44			No. 9	No. 3
36	.1069		No. 3			
7/64	.1094					
35	.1100	6x32				
34	.1110	6x36				
33	.1130	6x40			No. 10	
32	.1160			No. 14		No. 4
31	.1200	7x30, 7x32	No. 4		No. 11	
1/8	.1250	7x36				
30	.1285	8x30			No. 12	No. 5
29	.1360	8x32, 8x36	No. 5	No. 16		
28	.1405	8x40				
9/64	.1406					
27	.1440	9x30				No. 6
26	.1470	9x32, 3/16x24	No. 6	No. 18		
25	.1495	10x24			No. 14	
24	.1520					
23	.1540	10x28				
5/32	.1562					
22	.1570	10x30				No. 7
21	.1590	10x32				
20	.1610	3/16 x32	No. 7			
19	.1660			No. 20		
18	.1695				No. 16	No. 8
11/64	.1719					
17	.1730		No. 8			
16	.1770	12x24				
15	.1800			No. 24		
14	.1820	12x28				No. 9
13	.1850	12x32			No. 18	
3/16	.1875					

DRILL THIS SIZE HOLE		TO TAP FOR THIS SIZE BOLT OR SCREW	TO ALLOW CLEARANCE FOR THIS SIZE BOLT	FOR THIS SIZE WOOD SCREW PILOT		TO CLEAR SCREW BODY
DRILL SIZE	DEC. EQUIV.			IN SOFT WOOD	IN HARD WOOD	
12	.1890		No. 9			
11	.1910					
10	.1935	14x20				No. 10
9	.1960					
8	.1990					
7	.2010	1/4x20				
13/64	.2031					
6	.2040		No. 10			
5	.2055					
4	.2090	1/4x24			No. 20	No. 11
3	.2130	1/4x28				
7/32	.2187	1/4x32				
2	.2210					No. 12
1	.2280				No. 24	
A	.2340					
15/64	.2344		No. 12			
B	.2380					
C	.2420					
D	.2460					
1/4	.2500		No. 14			No. 14
E	.2500					
F	.2570	5/16x18	No. 14			
G	.2610					
17/64	.2656	5/16x18*	1/4"			No. 16
H	.2660					
I	.2720	5/16x24				
J	.2770					
K	.2810					
9/32	.2812	5/16x24-32*				
L	.2900					
M	.2950					
19/64	.2969					No. 18
N	.3020					
5/16	.3125	3/8x16-1/8P				
O	.3160					
P	.3230					
21/64	.3281	3/8x20-24	5/16"			No. 20
Q	.3332					
R	.3390					
11/32	.3437					
S	.3480					
T	.3580					
23/64	.3594					
U	.3680					
3/8	.3750	7/16x14				No. 24
V	.3770					
W	.3860					
25/64	.3906	7/16x20	3/8"			
X	.3970					
Y	.4040					
13/32	.4062					
Z	.4130					
27/64	.4219	1/2x12-1/2x13				
7/16	.4375	1/4" Pipe				
29/64	.4531	1/2x20-1/2x24	7/16"			
15/32	.4687	1/2x27				
31/64	.4844	9/16x12				
1/2	.5000					

ALL TAP DRILL SIZES ARE FOR 75% FULL THREAD EXCEPT \* ARE 60% FULL THREAD

WHERE SUBSTITUTION IS NECESSARY, USE NEXT LARGER SIZE DRILL.

WORCESTER, MASS., U. S. A.





*Self-Seller* **DISPLAY CABINET**  
**CARBON STEEL**

A *Self-Seller* Cabinet on your counter does sell. It puts you in the Tap and Die business for real profits with minimum investment.

The initial assortment of Taps, Dies, Screw Extractors, Die Stocks and Tap Wrenches includes all popular sizes, and is graduated according to normal customer demands. Displayed under the glass cover, they attract attention and invite buying. Requires only 18" x 13" counter space. Ample storage space at back for extra stock, and easy service.

All dies are 1" Outside Diameter

List of Contents is shown on next page

FOR LARGE HARDWARE STORES WE CAN SUPPLY  
A *Self-Seller* CABINET WITH MORE TOOLS IN EACH SIZE



### NO. 196 *Self-Seller* DISPLAY CABINET FURNISHED WITH SOLID OR ADJUSTABLE DIES

SELLING PRICE, EACH		SIZE	LIST OF CONTENTS - UNITS	
TAPS	DIES - 1" O. D.		TAPS	DIES - 1" O. D.
		<b>4 x 36</b>	6	3
		<b>4 x 40</b>	6	3
		<b>5 x 40</b>	6	3
		<b>6 x 32</b>	6	4
		<b>8 x 32</b>	6	4
		<b>10 x 24</b>	6	3
		<b>10 x 32</b>	6	3
		<b>12 x 24</b>	4	3
		<b>14 x 20</b>	3	3
		<b>3/16 x 24</b>	4	3
		<b>1/4 x 20</b>	5	4
		<b>5/16 x 18</b>	4	3
		<b>3/8 x 16</b>	4	3
		<b>7/16 x 14</b>	3	3
		<b>1/2 x 13</b>	3	3
		<b>1/4 x 28</b>	4	3
		<b>5/16 x 24</b>	4	3
		<b>3/8 x 24</b>	4	3
		<b>7/16 x 20</b>	3	3
		<b>1/2 x 20</b>	3	3
		<b>1/8 PIPE</b>	4	3
		<b>1/4 PIPE</b>	4	2

SELLING PRICE	ITEM	OUR NUMBER	QUANTITY
	Die Stocks	9	2
	Die Stocks	25	1
	T Tap Wrenches	1E	3
	T Tap Wrenches	1 1/2E	1
	T Tap Wrenches	2E	2
	Tap and Reamer Wrenches	21	3
	Tap and Reamer Wrenches	88	2
	Screw Extractors	2	4
	Screw Extractors	3	4
	Screw Extractors	4	4
	Screw Extractors	5	3

NO. 196 CONTAINS 195 TOOLS COMPLETE WITH SOLID DIES  
NO. 196A CONTAINS 195 TOOLS COMPLETE WITH ADJUST. DIES

SHIPPING WEIGHT 32 LBS.



## CARBON STEEL TAPS

**Ace** Taps are made of high carbon, alloy steel. Laboratory controlled heat treatment and modern production methods insure long life and clean, accurate threads. Furnished in right-hand threads only. Taper, Plug or Bottoming types are available in all sizes. Left-hand Taps are special.

### MACHINE SCREW STANDARD TAPS

AMERICAN NATIONAL THREAD FORM

SCREW GAUGE NO.	NUMBER OF THREADS PER INCH		OUTSIDE DIAM. INCHES	PRICE EACH	Weight per Dozen
	NC	NF			
<b>0</b>		80	.060		3 ozs.
<b>1</b>	64	72	.073		3 ozs.
<b>2</b>	56	64	.086		3 ozs.
<b>3</b>	48	56	.099		3 ozs.
<b>4</b>	40	36*	.112		3 ozs.
<b>5</b>	40	44	.125		3 ozs.
<b>6</b>	32	40	.138		3 ozs.
<b>8</b>	32	36	.164		4 ozs.
<b>10</b>	24	32	.190		5 ozs.
<b>12</b>	24	28	.216		6 ozs.
<b>14</b>	20*		.242		7 ozs.

\*NS (National Special) Furnished in *Self-Seller* Cabinets

### PIPE TAPS (NPT) TAPERED THREAD

SIZE PIPE	THREADS PER INCH	PRICE EACH	Weight per Dozen
<b>1/8</b>	27		3/4 lbs.
<b>1/4</b>	18		1 1/2 lbs.
<b>3/8</b>	18		2 lbs.
<b>1/2</b>	14		3 1/2 lbs.
<b>3/4</b>	14		6 lbs.
<b>1</b>	1 1/2		10 lbs.
<b>1-1/4</b>	1 1/2		17 lbs.
<b>1-1/2</b>	1 1/2		22 lbs.
<b>2</b>	1 1/2		38 lbs.

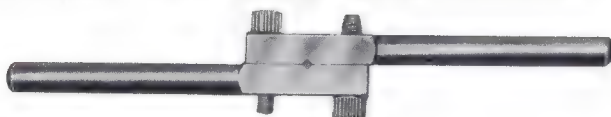
### TAP & REAMER WRENCH



The **Ace** Tap & Reamer Wrench has two hardened jaws for long wear. Rapid adjustment is obtained by turning the handle. Can be easily taken apart for cleaning. Nickel finish.

NUMBER	CAPACITY (TAPS)	PRICE EACH	Weight per Doz.
<b>88</b>	No. 4 to 1/2"		5 lbs.
<b>98</b>	1/4" to 1"		25 lbs.

### OFFSET TAP & REAMER WRENCH



The **Ace** offset type Tap & Reamer Wrench is made in 2 sizes, each size obtainable in plain Cadmium or polished Nickel finish. Of less expensive construction than our No. 88 but fully adequate for ordinary use.

NUMBER	CAPACITY (TAPS)	FINISH	PRICE EACH	Weight per Doz.
<b>21</b>	6 x 32 to 1/2"	Cadmium Plate		4 1/2 lbs.
<b>21KP</b>	6 x 32 to 1/2"	Polished Nickel		6 lbs.
<b>121</b>	1/4" to 1"	Cadmium Plate		24 lbs.
<b>121KP</b>	1/4" to 1"	Polished Nickel		24 lbs.

### T HANDLE TAP WRENCH

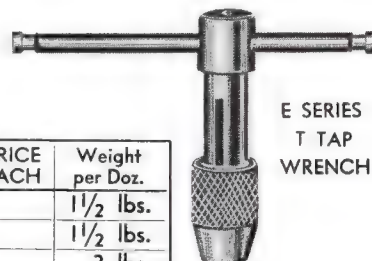
**Ace** T Handle Tap Wrenches (E Series) are the sliding handle type with spring tension to hold handle in any desired position. They are furnished in the sizes listed all with polished bodies and blued nuts.

TAP WRENCH NUMBER	CAPACITY (TAP SIZES)	PRICE EACH	Weight per Doz.
<b>0E</b>	No. 0 to No. 8		1 1/2 lbs.
<b>1E</b>	No. 0 to No. 12		1 1/2 lbs.
<b>1-1/2E</b>	No. 12 to 5/16"		3 lbs.
<b>2E</b>	1/4" to 1/2"		5 lbs.

### CARBON HAND TAPS

Diameter Inches	Threads per Inch		Price Each	Weight per Dozen
	NC	NF		
<b>1/8</b>	40			3 ozs.
<b>3/16</b>	24	32		5 ozs.
<b>1/4</b>	20	28		6 ozs.
<b>5/16</b>	18	24		8 ozs.
<b>3/8</b>	16	24		12 ozs.
<b>7/16</b>	14	20		18 ozs.
<b>1/2</b>	13-24-20			24 ozs.
<b>9/16</b>	12	18		2 lbs.
<b>5/8</b>	11	18		3 lbs.
<b>11/16</b>	11	16		4 lbs.
<b>3/4</b>	10	16		6 lbs.
<b>7/8</b>	9	14		7 lbs.
<b>1</b>	8	14		10 lbs.

Standard Packages — 1/2 or 1 Dozen of a size to a Box.



E SERIES  
T TAP  
WRENCH



### ROUND DIES

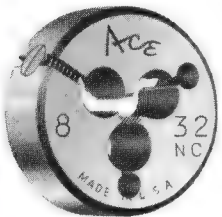
**Ace** DIES ARE ADJUSTABLE OR SOLID. HIGHEST QUALITY CARBON STEEL. CLEAN CUT, ACCURATE THREADS.

#### MACHINE SCREW STANDARD

SCREW GAUGE NUMBER	THREADS PER INCH		OUTSIDE DIAMETER OF THREAD	OUTSIDE DIAM. PRICE EACH			
	NC	NF		ADJ. 5/8"	ADJ. 13/16"	ADJ. 1"	SOLID 1"
0		80	.060 in.		X	X	X
1	64	72	.073 "		X	X	X
2	56	64	.086 "			X	X
3	48	56	.099 "			X	X
4	40	36*	.112 "				
5	40	44	.125 "				
6	32	40	.138 "				
8	32	36	.164 "				
10	24	32	.190 "				
12	24	28	.216 "				
14	20*		.242 "				
WEIGHT PER DOZ.				5 OZ.	8 OZ.	12 OZ.	12 OZ.

#### FRACTIONAL SIZES

THREAD DIAMETER INCHES	THREADS PER INCH		OUTSIDE DIAM. PRICE EACH					
	NC	NF	ADJ. 5/8"	ADJ. 13/16"	ADJ. 1"	ADJ. 1 1/2"	ADJ. 2"	SOLID 1"
1/8"	40					X	X	
3/16"	24	32				X	X	
1/4"	20	28					X	
5/16"	18	24					X	
3/8"	16	24	X	X			X	
7/16"	14	20	X	X			X	
1/2"	13	20,24	X	X				
9/16"	12	18	X	X	X			X
5/8"	11	18	X	X	X			X
11/16"	11	16	X	X	X			X
3/4"	10	16	X	X	X			X
7/8"	9	14	X	X	X	X		X
1"	8	12,14	X	X	X	X		X
WEIGHT PER DOZ.			5 OZ.	8 OZ.	12 OZ.	2 lbs.	4 lbs.	12 OZ.



**ADJUSTABLE**



**SOLID**



**PIPE TAPER THREAD**  
RIGHT HAND THREAD ONLY

#### SOLID ROUND PIPE DIES

PIPE SIZE INCHES	THREADS PER INCH	OUTSIDE DIAM. PRICE EACH		
		1"	1 1/2"	2"
1/8"	27			X
1/4"	18			X
3/8"	18	X		
1/2"	14	X		
WEIGHT PER DOZ.		10 OZ.	3 LB.	5 LB.

X Denotes not available.  
\* National special thread.  
Right hand threads only.  
Left hand dies are special.  
Packaged in 1/2 or 1 doz. boxes. Dies in No. 196 Self Seller Display Cabinets are all 1 inch outside diameter.

### ADJUSTABLE GUIDE DIE STOCKS

**Ace** adjustable guide DIE STOCKS insure clean accurate threads. The guide is adjustable for the full range of sizes that the Dies will thread. The self centering pins are securely locked by an individual screw for each guide pin which eliminates any play in the guide.



DIE STOCK NUMBER	HOLDS DIES OUTSIDE DIAM.	THREADING RANGE	PRICE EACH	Weight per Doz.
25	1 inch	No. 4 to 1/2"		7 lbs.
35	1-1/2 inch	1/4" to 3/4"		18 lbs.
45	2 inch	1/2" to 1"		40 lbs.

### PLAIN DIE STOCKS

**Ace** Plain Die Stocks have no guide. Rugged construction will give long service to anyone experienced in cutting threads.



DIE STOCK NUMBER	HOLDS DIES OUTSIDE DIAM.	THREADING RANGE	PRICE EACH	Weight per Doz.
58	5/8"	No. 0 to 1/4"		2 lbs.
13	13/16"	No. 0 to 5/16"		2 1/2 lbs.
9	1"	No. 4 to 1/2"		4 1/2 lbs.
95	1-1/2"	1/4" to 3/4"		16 lbs.

### HEX DIE ADAPTOR NO. 19

The **Ace** Hex Adaptor is used for holding 1" round dies to thread, or rethread, parts where an ordinary Die Stock could not be used. The hexagon body is 1" and fits all standard 1" hexagon sockets or wrenches. It can also be used with 1/2" square drive bars. The Hex Adaptor is indispensable for reaching out-of-the-way places.



PRICE EACH \$

WEIGHT 3 OZ.





Here is a set that will delight mechanic, hobbyist or householder. A lightweight, compact kit with a popular size range of Taps, Dies, Handles and accessories,—39 tools, each in its own easy-to-reach compartment,—all in a sturdy, unbreakable plastic case.

## THIS LIST OF CONTENTS SHOWS IT REALLY IS A **SUPER SET**

1 each No. 25 Die Stock, No. 88 Tap & Reamer Wrench, No. 1E T Tap Wrench, No. 514 Screw Pitch Gauge, Screw Driver and 1 each Tap and Die in the following sizes:

4 x 36, 6 x 32, 8 x 32, 10 x 24, 10 x 32 and 12 x 24 Machine Screw Standard.  
 $\frac{1}{4}$  x 20,  $\frac{5}{16}$  x 18,  $\frac{3}{8}$  x 16,  $\frac{7}{16}$  x 14, and  $\frac{1}{2}$  x 13 NC (U. S. Standard)  
 $\frac{1}{4}$  x 28,  $\frac{5}{16}$  x 24,  $\frac{3}{8}$  x 24,  $\frac{7}{16}$  x 20 and  $\frac{1}{2}$  x 20 NF (SAE Standard)  
 $\frac{1}{8}$ " Pipe

SUPER SET NUMBER	TYPE OF DIE 1" O. D.	PRICE EACH	SHIPPING WEIGHT
<b>614</b>	Solid		4 lbs.
<b>614A</b>	Adjustable		4 lbs.



Only ***Ace*** offers this ***SUPER SET***, combining all the advantages of the traditional wooden box, but eliminating excess weight and bulk. The ***Ace SUPER SET*** is 5 pounds lighter than the same tools in wooden cases; it is 50% smaller,—yet many times more durable. The tough composition case resists wear, and withstands hard use. Even the hinge, the weakest part of any case, has been laboratory tested for more than 70,000 openings and closings without breaking down. The ***SUPER SET*** is fully stocked to meet all average needs, or it can be bought with any number of selected units, and built up from time to time as may be required. Each of the following sets is packed in the ***SUPER SET*** box complete with No. 25 Die Stock, Screw Driver and No. 514 Screw Pitch Gauge.

SET NO.	<b>61</b>	<b>51</b>	<b>41</b>	<b>42</b>	<b>46</b>		<b>44</b>		
STANDARD	MACH. SCREW	NC	NC	NF	NC	& NF	NC	& NF	
1 EACH PLUG TAP AND 1" O.D. DIE	4 x 36	6 x 32	1/4 x 20	1/4 x 28	1/4 x 20	1/4 x 28	1/4 x 20	1/4 x 28	
	6 x 32	8 x 32	5/16 x 18	5/16 x 24	5/16 x 18	5/16 x 24	5/16 x 18	5/16 x 24	
	8 x 32	10 x 24	3/8 x 16	3/8 x 24	3/8 x 16	3/8 x 24	3/8 x 16	3/8 x 24	
	10 x 24	12 x 24	7/16 x 14	7/16 x 20	7/16 x 14	7/16 x 20	7/16 x 14	7/16 x 20	
	10 x 32	1/4 x 20	1/2 x 13	1/2 x 20	1/2 x 13	1/2 x 20	1/2 x 13	1/2 x 20	
	12 x 24				1/8 PIPE (Solid)		1/8 PIPE		
TYPE OF DIE	ADJ.	ADJ.	ADJ.	ADJ.	ADJ.		SOLID		
TAP WRENCH	1 E	88	88	88	88		88		
PRICE EACH									
WEIGHT EA.	2 lbs.	2 1/2 lbs.	2 1/2 lbs.	2 1/2 lbs.	3 1/2 lbs.		3 1/2 lbs.		

Set No. 444 Contains same sizes as Set No. 44 except that No. 25 Die Stock and No. 88 Tap and Reamer Wrench are not polished.

FOR DETAILS ON SETS IN WOOD BOXES, SEE PAGES 14 AND 15





## TAP AND DIE SETS CARBON STEEL

Ace Tap and Die Sets are packed in a variety of combinations of sizes that answer every requirement. Beautiful wooden boxes and highest quality tools make these sets ideal for mechanic or homeowner. Assembled with Plain Die Stocks, but plain finish, adjustable guide, Die Stocks can be furnished as explained below.

SET NO.	587	613	21	1	2	4
STANDARD	MACH. SCREW	MACH. SCREW	MACH. SCREW	NC	NF	NC & NF
1 EACH PLUG TAP AND DIE	4 x 36	4 x 36	6 x 32	1/4 x 20	1/4 x 28	1/4 x 20 1/4 x 28
	6 x 32	6 x 32	8 x 32	5/16 x 18	5/16 x 24	5/16 x 18 5/16 x 24
	8 x 32	8 x 32	10 x 24	3/8 x 16	3/8 x 24	3/8 x 16 3/8 x 24
	10 x 24	10 x 24	12 x 24	7/16 x 14	7/16 x 20	7/16 x 14 7/16 x 20
	10 x 32	10 x 32	1/4 x 20	1/2 x 13	1/2 x 20	1/2 x 13 1/2 x 20
	12 x 24	12 x 24				1/8 PIPE
	1/4 x 20					
DIE O. D.	5/8"	13/16"	1"	1"	1"	1"
DIE TYPE	ADJ.	ADJ.	SOLID	SOLID	SOLID	SOLID
TAP WRENCH	1E, 21KP	1E, 21KP	21	21	21	21
PRICE EACH						
WEIGHT EACH	2 1/2 lbs.	3 lbs.	3 lbs.	4 lbs.	4 lbs.	6 lbs.

SETS NOS. 1, 2 AND 4, PACKED WITH PLAIN FINISHED NO. 25 DIE STOCKS BECOME:

**SET NO. 1G & 2G**

PRICE EACH

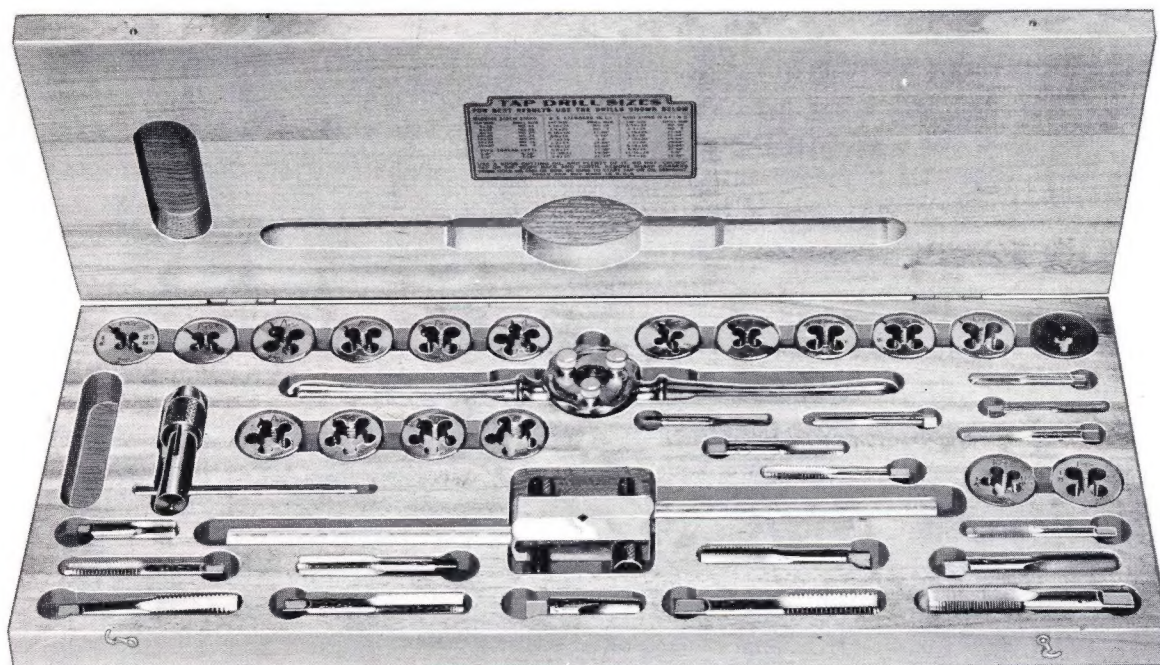
SHIPPING WEIGHT 4 1/2 LBS.

**SET NO. 4G**

PRICE EACH

SHIPPING WEIGHT 6 1/2 LBS.





**Ace** Tap and Die Sets are assembled with 1½" and 2" O. D. Dies (Adjustable Type only) in cutting sizes up to 1" diameter. Packed in wooden boxes they make very attractive sets, all with Adjustable Guide Die Stocks and suitable Tap Wrenches.

SET NO.	<b>312</b>	<b>322</b>	<b>3465</b>	<b>251</b>	<b>2101</b>
STANDARD	NC	NF	NC & NF	NC	NC & NF
1 EACH PLUG TAP AND ADJ. DIE	1/4 x 20	1/4 x 28	1/4 x 20 1/4 x 28	9/16 x 12	9/16 x 12 9/16 x 18
	5/16 x 18	5/16 x 24	5/16 x 18 5/16 x 24	5/8 x 11	5/8 x 11 5/8 x 18
	3/8 x 16	3/8 x 24	3/8 x 16 3/8 x 24	3/4 x 10	3/4 x 10 3/4 x 16
	7/16 x 14	7/16 x 20	7/16 x 14 7/16 x 20	7/8 x 9	7/8 x 9 7/8 x 14
	1/2 x 13	1/2 x 20	1/2 x 13 1/2 x 20	1 x 8	1 x 8 1 x 14
	9/16 x 12	9/16 x 18	9/16 x 12 9/16 x 18	NO. 251 BOX HAS SPACE FOR EXTRA SIZES	
	5/8 x 11	5/8 x 18	5/8 x 11 5/8 x 18		
	3/4 x 10	3/4 x 16	3/4 x 10 3/4 x 16		
			1/8" PIPE* 1/4" PIPE*		
DIES O. D.	1½"	1½"	1½"	2"	2"
DIE STOCK NO.	35	35	35	45	45
PRICE EACH					
WEIGHT EACH	11 lbs.	11 lbs.	17 lbs.	16 lbs.	21 lbs.

\* Pipe Dies are solid type.





## SCREW EXTRACTORS

For removing broken screws, bolts, studs and pipes that cannot be taken out any other way. A hole is drilled in the broken piece, using size drill marked on extractor to be inserted in the hole. Counter-clockwise turning of extractor wedges it into the hole and removes the broken piece on its own threads without damage to threaded hole.

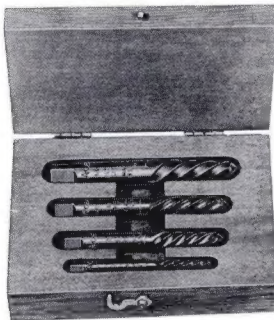
Scientific heat treatment of tough alloy steel makes Ace Screw Extractors practically unbreakable.

Screw Extractor Number	FOR REMOVING SCREWS DIAMETER (INCHES)	Diameter (In.) of Screw Extractor		DRILL SIZE Inches	PRICE EACH	Weight Per Dozen
		Shank	Point			
1	3/32 to 5/32	1/8	.060	No. 47		2 ozs.
2	5/32 to 7/32	3/16	.080	No. 35		3 ozs.
3	7/32 to 9/32	1/4	1/8	5/32		4 ozs.
4	9/32 to 3/8	5/16	3/16	1/4		9 ozs.
5	3/8 to 5/8—1/8 & 1/4" Pipe	7/16	1/4	19/64		18 ozs.
6	5/8 to 7/8—3/8" Pipe	5/8	3/8	13/32		2 1/2 lbs.
7	7/8 to 1 1/8 & 1/2" Pipe	7/8	15/32	17/32		5 1/2 lbs.
8	1 1/8 to 1 3/8 & 3/4" Pipe	1-1/32	3/4	13/16		8 lbs.
9	1 3/8 up & 1" Pipe	1-9/32	1	1-1/8		14 lbs.

Standard Packages Nos. 1, 2, 3, 4, 5 - 1 Doz. per Box, Nos. 6, 7, 8, 9 - 1/2 Doz. per Box

## SCREW EXTRACTOR SETS

VARIOUS COMBINATIONS ARE AVAILABLE PACKED IN ATTRACTIVE BOXES OR MOUNTED VERTICALLY IN BLOCKS.



SET NUMBER	Contains One Each Screw Extractor	CONTAINS ONE EACH DRILL	PRICE EACH	WEIGHT EACH
10	Nos. 3, 4, 5	None		1 lb.
20	Nos. 2, 3, 4, 5	None		1 lb.
30	Nos. 5, 6, 7, 8, 9	None		3 1/2 lbs.
35	Nos. 1, 2, 3, 4, 5	None		1 lb.
45	Nos. 1, 2, 3, 4, 5, 6	None		1 1/2 lbs.
15	Nos. 3, 4, 5	5/32", 1/4", 19/64"		1 lb.
25	Nos. 2, 3, 4, 5	No. 35, 5/32", 1/4", 19/64"		1 lb.

SETS 10-20-15-25 AND 45 IN HINGED COVER BOXES

## SETS NOS. 20P and 35P

PACKED IN ATTRACTIVE, SNAP FASTENED CASE TO FIT POCKET OR TOOL BOX

SET NUMBER	CONTAINS 1 EACH SIZE SCREW EXTRACTOR	PRICE EACH	WEIGHT EACH
20P	Nos. 2, 3, 4, 5		4 ozs.
35P	Nos. 1, 2, 3, 4, 5		5 ozs.



## REPAIRMAN'S REAMERS

Ace Repairman's Reamer is a long, tapered reamer, indispensable wherever holes are to be enlarged in sheet metal or other material. Highest quality steel, carefully heat-treated. Convenient T handle eliminates need of a wrench. Packed 1 dozen per box.



REAMER NUMBER	LENGTH - INCHES		DIAMETER		PRICE EACH	WEIGHT PER DOZEN
	Overall	of Taper	Shank	Point		
120	5-3/4	3-3/4	1/2"	1/8"		2 1/2 lbs.

## MICROMETERS

A precision measuring tool at a reasonable price. Correctly proportioned to minimize spring or distortion of frame. Frame is die cast from special alloy; all other parts are steel.

1. Accuracy guaranteed to .0005" in full range of Micrometer.
2. Screw type anvil makes zero adjustment easily obtainable.
3. Spring Friction Stop assures greater accuracy.
4. Accurate thread on spindle running in a steel bushing, firmly fixed to frame, preserves accuracy in continued use.
5. Frame, thimble and ratchet fully chromed.
6. Every Ace Micrometer is checked for accuracy with gauge blocks.

Ace Micrometers are packed in individual boxes, 6 boxes in an eye-catching, colorful counter display carton. NO. 100 RS - 0" TO 1" WITH SPRING FRICTION STOP. Price Each



Shipping Wgt.  
5 lbs. per doz.



ITEM	PAGE
Adaptor, Hex Die .....	11
Dies, All Sizes .....	11
Die Stocks .....	11
Display, Self Seller For Fractional Drills .....	2
Display, Self Seller For Wire Gauge (Twin) .....	3
Display, Self Seller For Taps & Dies .....	8
Drills, Fractional Sizes .....	4
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Tap & Die Sets ( $\frac{5}{8}$ " and $\frac{13}{16}$ " O.D. Dies) .....	14
Tap & Die Sets (1" O.D. Dies) .....	14
Tap & Die Sets (1 $\frac{1}{2}$ " and 2" O.D. Dies) .....	15
Tap & Die Sets, Super Sets .....	12
Tap Wrenches .....	10

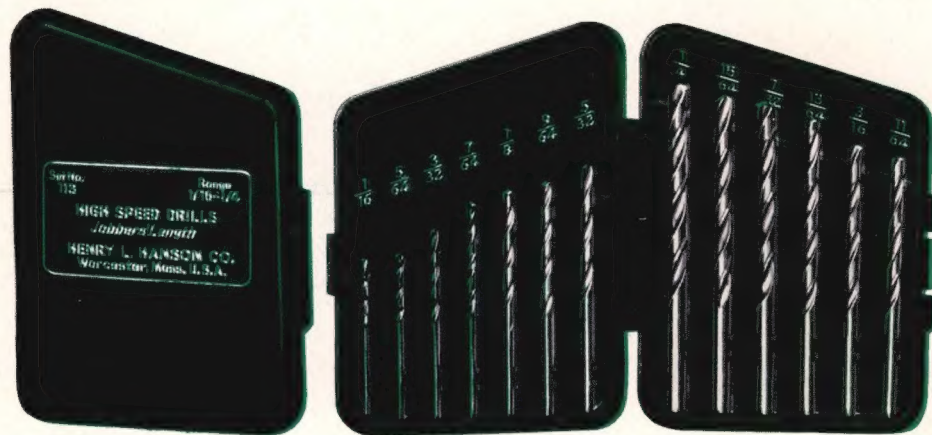
*You will find the Information Chart on page 7 very helpful in answering questions concerning sizes of drills to use for different sizes of Taps and Wood Screws.*



We proudly present THE NEW

**Hanson**

No. 113 HIGH SPEED STEEL  
*Jobbers Length* DRILL SET



AS A WORTHY COMPANION TO OUR

**ACE SUPER SET**



of TAPS & DIES